MAKAUSKAS, A. A. Cand Med Sci -- (diss) "Comparative evaluation of the effectiveness of vaccination ~~efficiency of inoculations~~ with small-pox ovovaccine and dermovaccine on the basis of clinical and immunological data." Vil'nyus, 1957. 22 pp with graphs (Acad Sci Lithuanian SSR. Inst of Experimental Medicine), 250 copies (KL, 5-58, 103)

L 37092-66
ACC NR: AP6017592

were observed. One consisting of five unequal lines, the other a single symmetrical line, and the third a single asymmetrical line with superimposed fine structure. The first signal can be explained by attributing it to a paramagnetic center that produces a hyperfine structure from three nonequivalent silver ions. The nature of the second signal is not perfectly clear, and the third signal can be attributed to impurities. This report was presented by AN BSSR Academician A. N. Sevchenko. Orig. art. has: 2 figures.

SUB CODE: 20/ SUBM DATE: 08Jun65/ ORIG REF: 002/ OTH REF: 003

Card 2/2

L 37092-66 EWT(1) IJP(c)

ACC NR: AP6017592 SOURCE CODE: UR/0250/66/010/001/0011/0014

30
B

AUTHOR: Potapovich, A. K.; Sviridov, V. V.; Makatun, V. N.; Branitskiy, G. A.

ORG: Institute of Physics, AN BSSR (Institut fiziki AN BSSR); Belorussian State University im. V. I. Lenin (Belorusskiy gosudarstvennyy universitet)

TITLE: Paramagnetic centers in irradiated silver oxalate

SOURCE: AN BSSR. Doklady, v. 10, no. 1, 1966, 11-14

TOPIC TAGS: silver compound, electron paramagnetic resonance, epr spectrum, [redacted] hyperfine structure, paramagnetic ion, POLYCRYSTAL, GAMMA IRRADIATION

ABSTRACT: To compare the character of formation of paramagnetic centers under the influence of ionizing radiation and ultraviolet light, the authors have investigated the EPR spectra in irradiated polycrystalline silver oxalate. This material was chosen because it is capable of deep photolysis and radiolysis with formation of metallic silver. To illuminate the influence of random impurities, some 30 specimens were tested. These were prepared by different methods, precipitation from aqueous solutions of silver sulfite in oxalic acid, precipitation from solutions of silver nitrate with oxalic acid, and preparation from ammonia solutions. The irradiation was at room temperature with mercury-quartz lamps and with γ rays from Co^{60} (72 r/sec). The EPR spectra were measured with a radio spectrometer having a sensitivity 10^{-11} mole of DPPH. No sample gave EPR signals prior to irradiation, but EPR signals appeared in all samples after irradiation with both γ rays and ultraviolet. The signals disappeared only when the samples were heated above 100C. Three different types of signals

Card 1/2

STRASHNOV, V.I.; MAKATUN, V.N.

Use of the RO-1 apparatus in the Surgical Clinic of the I.P. Pavlov First Leningrad Medical Institute. Report No.1. Nov. med. tekh. no.3:54-57 '65. (MIRA 19:1)

YERMOLENKO, I.N. [Yarmolenka, I.M.]; MAKATUN, V.N.; GUSEV, S.S. [Husev, S.S.]

Study of the conditions of the synthesis of monoacetoxy(?) silicone oils for the purpose of selecting an efficient flowsheet for its production. Vestsi AN BSSR. Ser. fiz.-tekh. nav. no.2:52-60 '62. (MIRA 16:4)

YERMOLENKO, I. N.[IArmolenka, I. M.]; POTAPOVICH, A. K.[Patapovich, A. K.]; MAKATUN, V. N.[Makatun, V. N.]

Use of spectroscopic methods in studying electron paramagnetic resonance and gamma-irradiated cellulose materials. Vestsi AN BSSR. Ser. fiz.-tekh. nav. no.1:65-71 '63. (MIRA 16:4)

(Paramagnetic resonance and relaxation)
(Cellulose) (Spectrum analysis)

MAKATUN, V.N.; POTAPOVICH, A.K.; YERMOLENKO, I.N.

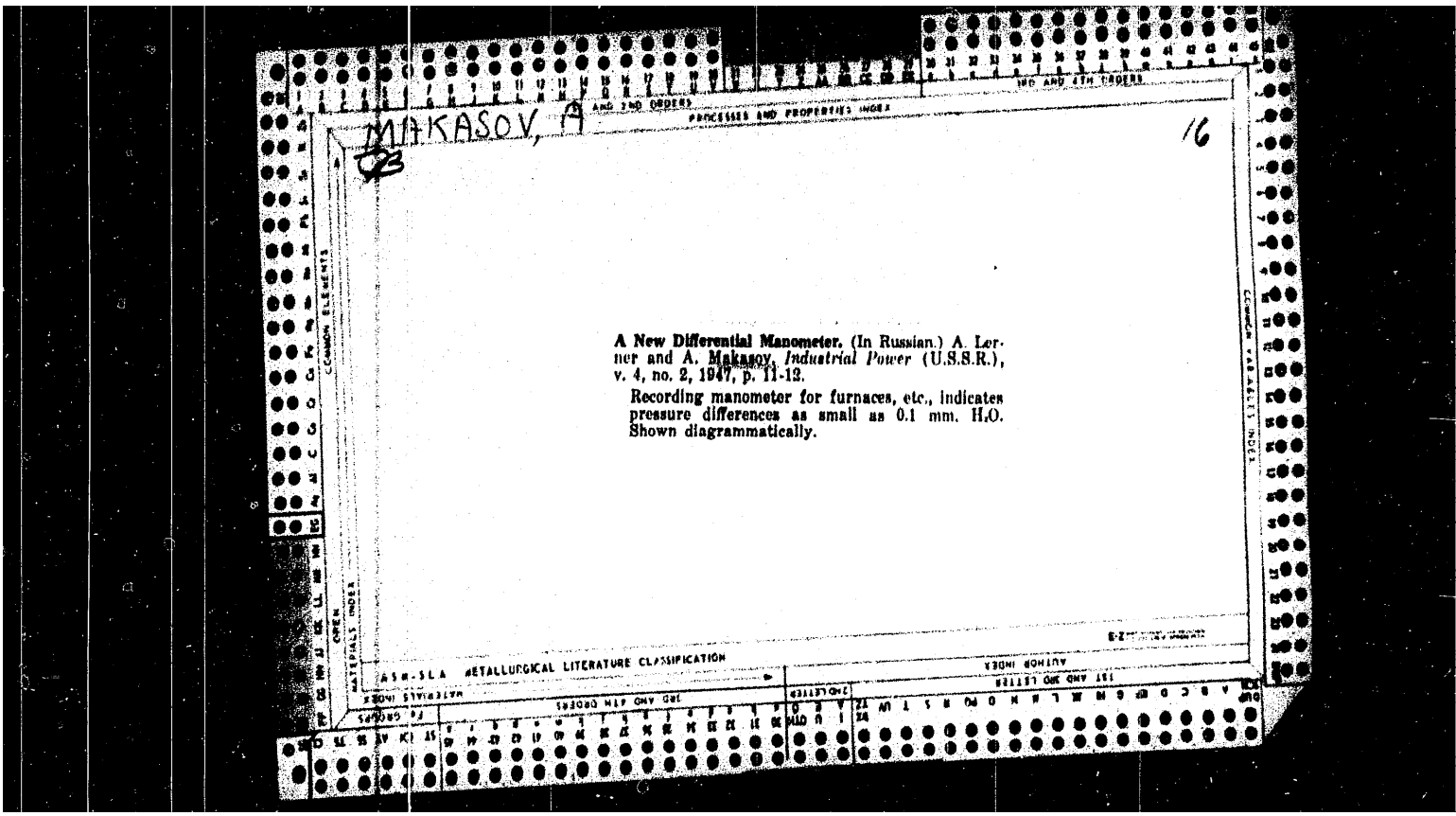
Long-lived radicals formed in the γ-irradiation of cellulose.
Vysokom.soed. 5 no.3:467-468 Mr '63. (MIRA 16:3)
(Radicals (Chemistry)) (Cellulose) (Radiation)

MAKATS, G.M. (Khar'kov); MAKEYEV, B.A. (Khar'kov)

Optimalizer for solving some problems in whole-number linear programming. Avtom. i telem. 25 no.2:262-268 F '64.
(MIRA 17:4)

MAKATS, G.M.; MAKEYEV, B.A.; NOVOZHILOV, V.P.

Unit for solving the problem of optimum laying-out of a strip for rolling two type sizes. Avtom. i prib. no.4:33-36 O-D '63. (MIRA 16:12)



MAKASHVILI, Z.A.

Def. at
Tbilisi State U.

Джохадзе Давид Иванович. Изменения белка в вегетативных гибридах фасоли. 1952. 156 с.

Защ. 1953, 30.6.

1050. Бабак Мария Антоновна. Приспособительные изменения содержания фосфатидов в мышцах.

Защ. 1953, 29.6.

1051. Маградзе Петр Георгиевич. Проявление вамнококоза при искусственном заражении собак и при естественной инвазии у промежуточного хозяина. 1939.

Защ. 1940, 26.2.

1052. Макашвили Зураб Александрович. Данные по биохимии стоблячной антоксификации. 1950. 2, V, 22 с., 10 тбл., рис.

Защ. 1951, 30.5.

1053. Ройтбак Александр Ильич. Дыхательный центр лягушки. 1944. 84 с.

Защ. 1945, 18.7.

1054. Саркисян Санострух Мартиросович. Генетическое изучение комнатной мухи с целью выработки нового биологического метода борьбы с ней. Ереван. 1943. 97, 5 с., [5] вкл. л., тбл.

Защ. 1944, 22.4.

1055. Сванидзе Игорь Константинович. К сравнительной гистологии слизистой оболочки желчного пузыря позвоночных. 1954. 174 с., 39 рис., илл.

Защ. 1955, 23.2.

1056. Собиева Ольга Борисовна. Соляная кислота как возбудитель внешней секреции поджелудочной железы. Дзауджикау. 1948. 159 с., рис., диагр., илл.

Защ. 1948, 25.6.

Dissertation for degree of

Candidate Biological Sciences

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500022-6

Country : USSR E
Category: Virology. Bacterial Viruses (Phages)

Abs Jour: Ref Zhur-Biol., No 23, 1958, No 103498

which does not lyse type V cultures. After three years of keeping, the Z phage lost its specificity. By means of the phages isolated it was possible to differentiate the principal serotypes of the Flexner W and V group which are the main serotypes in Georgia. -- Ya. I. Rautenshteyn.

Card : 2/2

E

Country : USSR
Category: Virology. Bacterial Viruses (Phages)

Abs Jour: Ref Zhur-Biol., No 23, 1958, No 103498

Author : Makashvili, Ye. G.
Inst : -
Title : Methods of Phagotyping of Flexner Dysentery Cultures

Orig Pub: Sb. Bakteriofagiya. Tbilisi, Gruzmedgiz, 1957, 257-260

Abstract: Among dysentery phages isolated from sewage a W phage has been demonstrated which lyses all type W cultures as well as certain type V strains and a Z phage which specific only for cultures of type Z. As a result of the adaptation of the W phage to a V culture a WV phage is obtained which lyses all type W and type V cultures. In addition, an XWZ phage has been isolated

Card : 1/2

Country : USSR
Category: Virology. Bacterial Viruses (Phages)

Abs Jour: Ref Zhur-Biol., No 23, 1958, 103489

It should be prepared for typhoid cultures of all the principal phagotypes. -- Ya. I. Rautenshteyn.

Card : 3/3

Country : USSR
Category: Virology. Bacterial Viruses (Phages)

Abs Jour: Ref Zhur-Biol., No 23, 1958, 103489

types were encountered less often: E, 16 o/o; C, 11 o/o; D_4, 8.9 o/o and D_1, 2.6 o/o. The STP were not homogeneous with respect to their effects on typhoid cultures. Secondary cultures obtained under the influence of one STP were resistant to all the other STP. These secondary cultures do not contain Vi-antigen and are in the W form. It is not practical to begin to mass produce STP. They should be used only in epidemiological practice for the typing of typhoid cultures. The typhoid phage which is produced for therapeutic and prophylactic purposes and which is a mixture of different phages is characterized by its high degree of virulence -- it lyses secondary cultures, prevents their occurrence and possesses a broad spectrum of lytic action.

Card : 2/3

E

Country : USSR
Category: Virology. Bacterial Viruses (Phages)

Abs Jour: Ref Zhur-Biol., No 23, 1958, 103489

Author : Makashvili, Ye. G.
Inst :
Title : Phagotypes of Typhoid Bacilli Encountered in the Georgian SSR and Typhoid Phages in the Aspect of Their Practical Application

Orig Pub: Sb. Bakteriofagiya. Tbilisi, Gruzmedgiz, 1957, 173-182

Abstract: The use of standard typhoid phages (STP) for the differentiation of 1198 typhoid cultures isolated in Georgia made it possible to establish the fact that type A cultures (30 o/o) and type F cultures (30 o/o) are predominant among them. The cultures of other

Card : 1/3

MAKASHVILI, Ye. G. AND GOGOLADZE, Z. D.

"The Influence of Bacteria on the Activity of Bacteriophage," Trudy Tbilisi NII Microbiol Epidemiol i Bacteriof, 1950, Vol II

Mikrobiologiya, Vol XX, No. 5, 1951.
[redacted]W-24635.

MAKASHVILI, R.I.

Age of the Bardadzor intrusion. Soob.AN Gruz.SSR 25 no.5:543-545 N '60. (MIRA 14:1)

1. Tbilisskiy gosudarstvennyy universitet imeni Stalina. Predstavleno chlenom-korrespondentom Akademii P.D. Gamkrelidze.
(Somkheti Range--Rocks, Igneous)

MAKASHVILI, R.I.

Tsopi metasomatic serpentine. Soob.AN Gruz.SSR 24 no.4:423-428 Ap '60. (MIRA 13:7)

1. Tbilisskiy gosudarstvennyy universitet im. Stalina. Predstavleno akademikom G.S.Dzotsenidze.
(Marneuli District--Serpentine)

MAKASHVILI, G.A.

Some biochemical characteristics of aboriginal and introduced apple varieties in Kartlia, Georgian S.S.R. Biokhim.pl.i ovoshch. no.6: 185-196 '61. (MIRA 14:6)

1. Institut sadovodstva, vinogradarstva i vinodeliya Akademii sel'skokhozyaystvennykh nauk Gruzinskoy SSR.
(Kartlia--Apple--Varieties) (Fruit--Chemical composition)

MAKASHVILI, G. A.

Dissertation: "A Study of the Prolonged Storage of Apples Grown in Certain Regions of the Georgian SSR." Cand Agr Sci, Georgian Order of Labor Red Banner Agricultural Inst, 1 Jun 54. Zarya Vostoka, Tbilisi, 20 May 54.

SO: SUM 284, 26 Nov 1954

DMITRIYEVA, A.A.; MAKASHVILI, A.K., red.; BAKRADZE, D.S., red.izd-va; TODUA, A.R., tekhred.

[Key for the identification of plants of Adzharia] Opredelitel' rastenii Adzharii. Pod red. A.K.Makashvili. Tbilisi, Izd-vo Akad.nauk Gruzinskoi SSR, 1959. 446 p. (MIRA 13:8)
(Adzhar A.S.S.R.--Botany)

USSR/Cultivated Plants - Ornamental. M

Abs Jour : Ref Zhur Biol., No 18, 1958, 82597

Author : Makashvili, A.
Inst :
Title : Our Forest and Field Flowers.

Orig Pub : M-vo prosveshch. GruzSSR, Tbilisi, Nauchno-metod. kabinet, 1957, 128 str., ill., 20 r.

Abstract : No abstract.

Card 1/1

USSR / Cultivated Plants. Plants for Technical Use. M
Oil Plants. Sugar Plants.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24998

The oil from the seeds of these plants have low iodine and acetyl numbers. The plant appears to be a good prospect for cultivation, because it is very drought-resistant and may be grown on gravel and rocky places which are not fit for the cultivation of other plants. -- P. N. Kizima

Card 3/3

USSR / Cultivated Plants. Plants for Technical Use. M
Oil Plants. Sugar Plants.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24998

attaining a height of 75 cm. The stalk has many branches and is covered with hard fibers. The flowers are yellow, collected in spiciform inflorescences. The fruit is straight or curved tubercular pod 10-18 cm in length, opening between two valves. Seeds in the nest are homogeneous, very small (1 mm in length and 0.6 mm in width) and of a yellow and light-brown color. The absolute weight of the seeds is 0.284 g. The plant contains 26.1% of fat and 29.9% of raw protein. It passes the winter in the phase of budding. Flowering is from the end of April until the end of May. The best time of seed gathering is in the beginning of July.

Card 2/3

USSR / Cultivated Plants. Plants for Technical Use. M
Oil Plants. Sugar Plants.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24998

Author : Makashvili, A. K.; Sadzhan, N. D.
Inst : Tbilisi State Pedagogical Institute
Title : Concerning a Certain Wild-Growing Oil Plant

Orig Pub : Tr. Tbilissk. gos. ped. in-ta, 1957, 11, 661-664

Abstract : Investigatory results of the wild-growing oil plant, Gray Hirschfeldia (Hirschfeldia incana (L.) Lag. Foss.) of the Cruciferae family. The Gray Hirschfeldia is a Mediterranean Sea species, found in the USSR only in Crimea and on the Caucasus. In Georgia, it grows in the environs of Tbilisi. It is a annual plant of the winter type,

Card 1/3

MAKASHVILI, A. K.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

Name	Title of Work	Nominated by
Kapeller, O. A. Kemulariya-Natadze, L. N. Ketskhoveli, N. N. Kutateladze, Sh. I. Makashvili, A. K. Mandenova, A. P. Sakhakia, M. F. Sosnovskiy, D. I. Ter-Khachaturova, S. Ya. Kharadze, A. L. Shkhiyan, A. S.	"Flora of Georgia" (Vols I- VIII)	Institute of Botany, Academy of Sciences Georgian SSR

SO: W-30604, 7 July 1954

MAKASHVILI, A.K.

New species of pinks (Dianthus Ketzkhovelii m.sp.n.) from the Adzhar A.S.S.R. Soob.AN Gruz.SSR 8 no.7:453-455 '47.
(MIRA 9:7)

1.Akademiya nauk Gruzinskoy SSR, Botanicheskiy institut, Tbilisi. Predstavleno chlenom-korrespondentom Akademii L.L.Dekaprelevichem.
(Adzhar A.S.S.R.--Pinks)

15.9210

82723
S/135/60/000/007/003/010
A051/A029

AUTHORS: Shatalov, V.F., Popova, Ye.N., Gergasevich, T.V., Zenina, T.N., Krygina, K.G., Makashova, A.M.

TITLE: The Production of Butadiene-Styrene Rubbers in an Emulsion in Modified Colophony Soap Systems

PERIODICAL: Kauchuk i Rezina, 1960, No. 7, pp. 6 - 9

TEXT: The authors refer briefly to the significance of improving the performance of automobile and other tires, which involves the perfecting of the butadiene-styrene rubber properties, the main raw material used in their production. The properties of the rubber are improved in comparison with the use of Nekal by using emulsifying agents during the emulsion copolymerization of butadiene and styrene. Nekal has the tendency to form a calcium salt, which reduces the mileage of the tire. The conditions for the production of butadiene-styrene rubber in an emulsion with modified colophony soap and synthetic fatty acids were investigated at 5 and 50°C. The method for the production of rubber both at 5 and 50°C is outlined. The copolymerization of 1,3-butadiene with styrene in an aqueous emulsion with modified colophony soap was studied in 2 systems: 1) with the oxidation-re-

Card 1/3

duction group hydroquinone-sodium sulfite-ammonia-hydroperoxide of 1,1-diphenylethane and 2) the oxidation-reduction group formaldehyde-sodium sulfoxylate-trilon B-ferric sulfate hydroperoxide of 1,1-diphenylethane. Potassium soap of hydrated and disproportionate colophony with an addition of synthetic fatty acid soap was used as the emulsifying agent (Table 1). The composition recommended for the synthesis of low-temperature butadiene-styrene rubber is cited. Table 2 shows the comparative rates of polymerization at different contents. Sodium chloride and acetic or sulfuric acids are suggested as the coagulating agent of the latex with the colophony soaps. The order in which the reacting substances are mixed affects the nature of the coagulum, the stability of the process and the expenditure of sodium chloride. Table 3 is a listing of the physico-mechanical properties of the low-temperature rubbers. The modification method of the colophony does not affect the copolymerization process at both 5 and 50°C. The order by which the acid is introduced into the system has a significant effect on the rubber formation from the latex with colophony soap. In addition to this, the waiting period between each mixing of the ingredients is another important factor determining the nature

Card 2/3

of the rubber formation from the latex. It was also established that the less soap is used in the content, the less chloride is needed for the reaction. It is seen that the rubber formed in the colophony soap system is more pliable than that formed in a Nekal system, the dosage of the regulator remaining constant. The former is more easily masticated, its rubber mixtures have greater adhesiveness and vulcanize more rapidly. There are 4 tables and 6 references: 4 Soviet and 2 English.

ASSOCIATION: Voronezhskiy zavod sinteticheskogo kauchuka im. S.M. Kirova (The Voronezh Synthetic Rubber Plant im. S.M. Kirov)

Card 3/3

MAKASHOVA, A.M.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500022-6

DAYKHIN, M.Ya.; MAKATUN, V.N.; SILIN, V.A.; MODLIN, A.G.

New method for the control of the impurity of spinnerets.
Khim. volok. no.2:58-59 '65. (MIRA 18:6)

1. Mogilevskiy zavod im. Kuybysheva.

MAKASHOV, V.N.; MIKHAYLOV, Yu.I.

Results of the industrial testing of the KPR-60 mining apron conveyor.
Met. i gornorud. prom. no.5:55-57 S-O '64. (MIRA 18:7)

MAKASHOV, V.N.

Apron conveyor for operation during cavings. Met. i gornorud. prom. no.4:70-71 Jl-Ag '64. (MIRA 18:7)

MEKHANOV, Yu.I., inzh.; SHIRENKO, P.I., inzh.; KUKAGEV, V.N., inzh.

Conveyor train for "Slantsy" Combine mines. Gor. mash. trud. KGRI no. 21:224-233 '63. (MIRA 17:7)

MAKASHOV, V.N., inzh.

Small-sized driving motor drums for conveyors. Mashinostroenie no.3:82-85 My-Je '63. (MIRA 16:7)

1. Gosudarstvennyy institut po proyektirovaniyu oborudovaniya po dobyche i obogashcheniyu rud, g. Krivoy Rog.

(Conveying machinery--Electric driving)

MAKASHOV, V.N., inzh.; SLUPITSKIY, V.M.

Automatic scraper winch 55LAS. Gor.zhur. no.5:56-58 My '62.
(MIRA 16:1)

1. Gosudarstvennyy institut po proyektirovaniyu oborudovaniya po dobyche i obogashcheniyu rud, Krivoy Rog.
(Winches) (Automatic control)

MAKASHOV, V.N., inzh.; SLUPITSKIY, V.M., inzh.

Automatic scraper hoists. Mekh.i avtom.proizv. 16 no.3:35-36 Mr '62. (MIRA 15:4)

(Mine hoisting)

MAKASHOV, V.N.; SLUPITSKIY, V.M.

Mechanism for withdrawing timber in roof caving. Ugol' Ukr. 6 no.8:39-40 Ag '62. (MIRA 15:11)
(Mine timbering)

MAKASHOV, V.N., inzh.

Scraper wich 100LAS with automatic and remote control systems.
Gor. zhur. no.10:64-66 O '61. (MIRA 15:2)

1. Giprorudmash, Krivoy Rog.
(Winches)
(Automatic control)
(Remote control)

AUTHOR: Makashov, V.N. SOV/122-58-8-4/29

TITLE: The Appropriate Choice of the Angular Location for the Driving Pinion of a Rotary Excavator Wheel (Ratsional'-nyy vybor ugla ustanovki shesterni privoda rotornogo kolesa ekskavatora)

PERIODICAL: Vestnik mashinostroyeniya, 1958, Nr 8, pp 17-18 (USSR)

ABSTRACT: It is pointed out that by an appropriate angular positioning of the pinion driving a rotary excavator wheel, the stresses in the shaft can be reduced to a minimum. The condition of minimum bearing reaction leads, by differentiation, to a definite angular position. An analysis is given for an example illustrated diagrammatically. There is 1 figure.

Card 1/1 1. Earth moving equipment 2. Mechanical drives--Design

SOLOV'YANOV, Leonid Nikolayevich; MAKASHOV, Leonid Nikolayevich; KUCHER, Yakov Andreyevich; SIDORENKO, A.P., kand. tekhn. nauk, retsenzent; NAZAROV, P.P., kand. tekhn. nauk, retsenzent

[Boring machinery for metal mines] Burovye mashiny dlia metallicheskikh rudnikov. Moskva, Nedra, 1964. 253 p. (MIRA 17:11)

Makashov, L.N.

SOLOV'YEIOV, L.N., inzhener; MAKASHOV, L.N., inzhener.

New pneumatic-feed columns developed by the State Institute for the Planning of Mining Machinery. Gor. zhur. no.4:32-33 Ap '57. (MLRA 10:5)

1. Giprorudmash.
(Rock drills)

SOLOV'YANOV, L.N., inzh.; MAKASHOV, L.N., inzh.

New machines used in drift mining. Mekh.i avtom.proizv. 14 no.1:33-36 Ja '60. (MIRA 13:5)
(Mining machinery--Technological innovations)

MAKASHOV, I.P.; POLEGAYEVA, E.A.

Control of technological parameters by means of electron-beam indicators. Avtom.i prib. no.4:36-38 O-D '62. (MIRA 16:1)

1. Lisichanskiy filial Instituta avtomatiki Luganskogo soveta narodnogo khozyaystva.

(Electronic control)

MAKASOV, B.N. [Makashov, B.N.], inz.; SLUPICKIJ, B.M. [Slupitskiy, B.M.]; PELNAR, ~~A., dr., inz.~~ [translator]

A scraper winch of 55 kv output with automatic and remote control. Rudy 10 no.8:261-265 Ag '62.

1. Statni ustav pro projektovani a konstrukci dulnich stroju, Krivoj Rog (for Makasov and Slupickij).

MAKASHOV, A. V.

Glaznye bolezni domashnikh zhivotnykh [Eye diseases of domestic animals].
3-e. izd. Moskva, Sel'khozgiz, 1953. 240 p.

SO: Monthly List of Russian Accessions, Vol. 7 No. 2 May 1954.

MAKASHOV, A. V.

"The Use of Electric Current in Anesthetizing Dogs and Horses,"

SO: Veterinariya, No. 1, 1950. Dr, of Vet. Sci., Prof., -c1950-.

MAKASHOV, A. [V.]

MAKASHOV, A. Care for the hoofs, cleaning and shoeing horses. Verenezh, 1949.
31 pages with illustrations; price 60 kopeks; 10,000 copies.

Source: Veterinariya; 26; 9; September 1949 uncl
TABCON

MAKASHOV, A. V., Prof.

"Eye diseases of domestic animals."

Sil'khozgiz, Moskva, 1948. (Approved by the Ministry of Higher Education USSR, as a textbook for Vet. institutions and faculties (Second supplemental edition.) Reviewed by: V. N. FOMINYKH, Cand. of Vet. Sciences

SO: Vet. 26(4) 1949, p 47

MAKASHOV, A.M.

MAKASHOV, A.M.

Remarks of a teacher. Politekh. obuch. no.2:93-94 F '58.
(MIRA 11:1)

1.Sumskaya shkola No.2.
(Technical education)

MAKASHOV, Aleksey Ivanovich; SOLOV'YEV, Georgiy Fedorovich; KOROBKOVA, G., red.; NEMYTOV, V., tekhn.red.

Mtsensk. Orel, Orlovskoe knizhnoe izd-vo, 1959. 113 p. (MIRA 13:5)

(Mtsensk)

PAVLENKO, V.V., nauchnyy sotrudnik; MAKASHINA, G.V., starshiy nauchnyy sotrudnik; CHERKAVSKIY, O.F.; DAVLETSHINA, A.G. (Tashkent); YEFIMOVA, L.F. (Tashkent)

Brief news. Zashch. rast. ot vred. i bol. 9 no.12:48-49 '64.
(MIRA 18:4)

1. Botanicheskiy sad Dnepropetrovskogo universiteta (for Pavlenko). 2. Kaliningradskaya sel'skokhozyaystvennaya opytnaya stantsiya (for Makashina). 3. Institut fiziologii rasteniy AN UkrSSR (for Cherkavskiy).

MAKASHINA, G.V., starshiy nauchnyy sotrudnik

A carelessly made book. Zashch. rast. ot vred. i bol. 9 no.8:61-62 '64. (MIRA 17:12)

1. Kaliningradskaya sel'skokhozyaystvennaya opytnaya stantsiya.

MAKASHINA, G., starshiy nauchnyy sotrudnik

Book reviews and bibliography. Zashch. rast. ot vred. i bol. 9 no.3:62-63 '64. (MIRA 17:4)

1. Kaliningradskaya sel'skokhozyaystvennaya opytnaya stantsiya, poselok Slavyanskoye, Kaliningradskoy oblasti.

64-1-1/19

Development of a Two-Stage-Process for the Production of Isopren From Isopentane

ASSOCIATION: All-Union Scientific Research Institute of Synthetic Rubber imeni S.V. Lebedev, Academician.
(Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka imeni akademika S. V. Lebedeva)

AVAILABLE: Library of Congress

1. Isoprene (Polymerized)-Preparation 2. Isopentane-Catalysis
3. Isoamylene-Catalysis 4. Hydrocarbons-Pyrolysis
5. Isopentane-Catalytic dehydration 6. Synthetic rubber-Preparation

Card 4/4

Development of a Two-Stage-Process for the Production of Isopren From Isopentane

boiling points, a dehydration was carried out without a previous separation of the mixture. A mixture of isopentane and isoamylene (60 : 40) was dehydrated on the conditions of the above-mentioned second stage. The results show that only the isoamylenes are considerably dehydrated. In the course of the further investigations the same mixture was dehydrated in vacuum and with the catalyst for isopren (first stage). It was found that a catalysate with 15 - 18 % isopren can be obtained at 580 °C and 190 mm of mercury column, whereby the catalysate can be dehydrated a second time after the separation from isopren and a new mixture with a corresponding quantity of isopentane. Another variant of dehydration was carried out with an isopentane-isoamylene mixture with benzene. The investigations are carried on, however, pilot plant experiments of dehydrations of this kind are already carried out in one of the competent experiment stations. There are 9 tables, and 1 reference, 1 of which is Slavic.

Development of a Two-Stage-Process for the Production of Isopren From Isopentane

ratio 1 : 4 : 10. A precise table of all reaction products is given. The second dehydration stage was carried out on a catalst developed by A. T. Menyaylo for the dehydration of butylene into divinyl. The experiments were conducted with a mixutre consisting of (1 : 10 volume) isoamylenes (mainly trimethylethylene) and steam, at normal pressure and 520 - - 580°C. The results obtained show that the optimum temperature interval is between 540 - 560°C, and that a prolongation of the duration of the reaction cycle improves the dehydration process. The reaction product consists of 27 - 29% of isopren. In a dehydration, where each of the above-mentioned isoamylenes was dehydrated separately the results showed that the trimethylethylene and the unsymmetrical methylethylethylene are dehydrated with equal velocity, isopropylethylene, however, more slowly. In the investigation of the catalysate it was found that the isomerization and formation of an isomeric mixture takes place simultaneously with the dehydration of the isoamylenes. In order to simplify the working method which was complicated by the separation of the different reaction products of the first operational stage with adjacent

MAKASHINA, A. N.

64-1-1/19

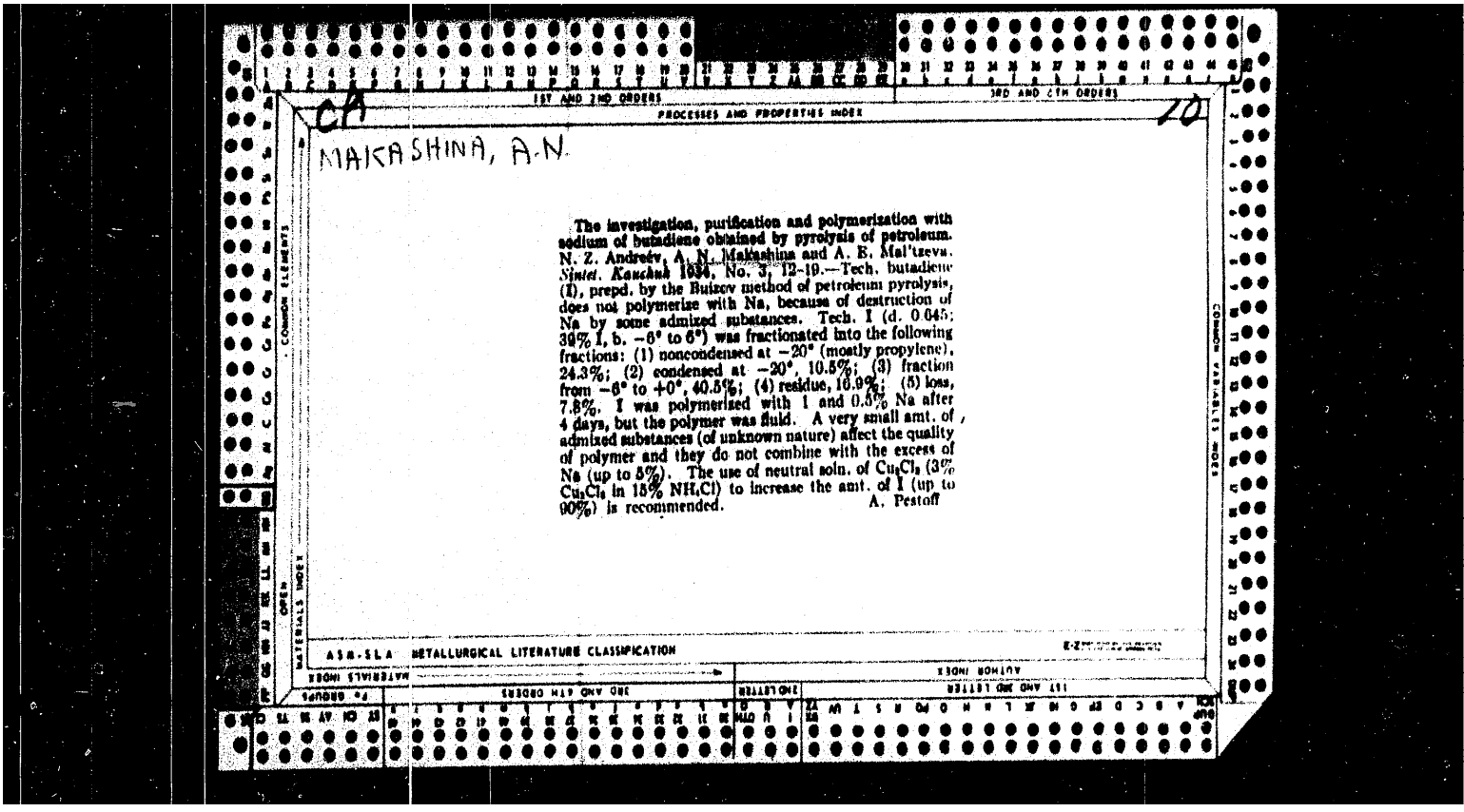
AUTHORS: Gorin, Yu. A., Vasil'yev, A. A., Makashina, A. N.

TITLE: Development of a Two-Stage-Process for the Production of Isopren From Isopentane (Razrabotka dvukhstadiynogo protsessa polucheniya izoprena iz izopentana)

PERIODICAL: Khimicheskaya Promyshlennost', 1958, Nr 1, pp. 1 - 4 (USSR)

ABSTRACT: In the All Union Scientific Research Institute imeni Member of the Academy S. V. Lebedev for Synthetic Rubber isopentane was catalytically dehydrated into isoamylene and then the latter into isopren in order to obtain isopren. For the first dehydration stage a catalyst (somewhat improved) was used which was developed by S. M. Monozon in the above-mentioned institute for the dehydration of butane into butylene. The experiments were conducted with a steady catalyst layer of 40 ml at a temperature of 515 - 525°C and a transit velocity of 1 - 2 l of liquid isopentane for 1 l of catalyst per hour. The obtained liquid reaction products consisted mainly (80,6%) of a mixture of isoamylenes, i. e. isopropylethylene, unsymmetrical methylethylethylene and trimethylethylene in the

Card 1/4



CA

MAKASHINA, A.N.

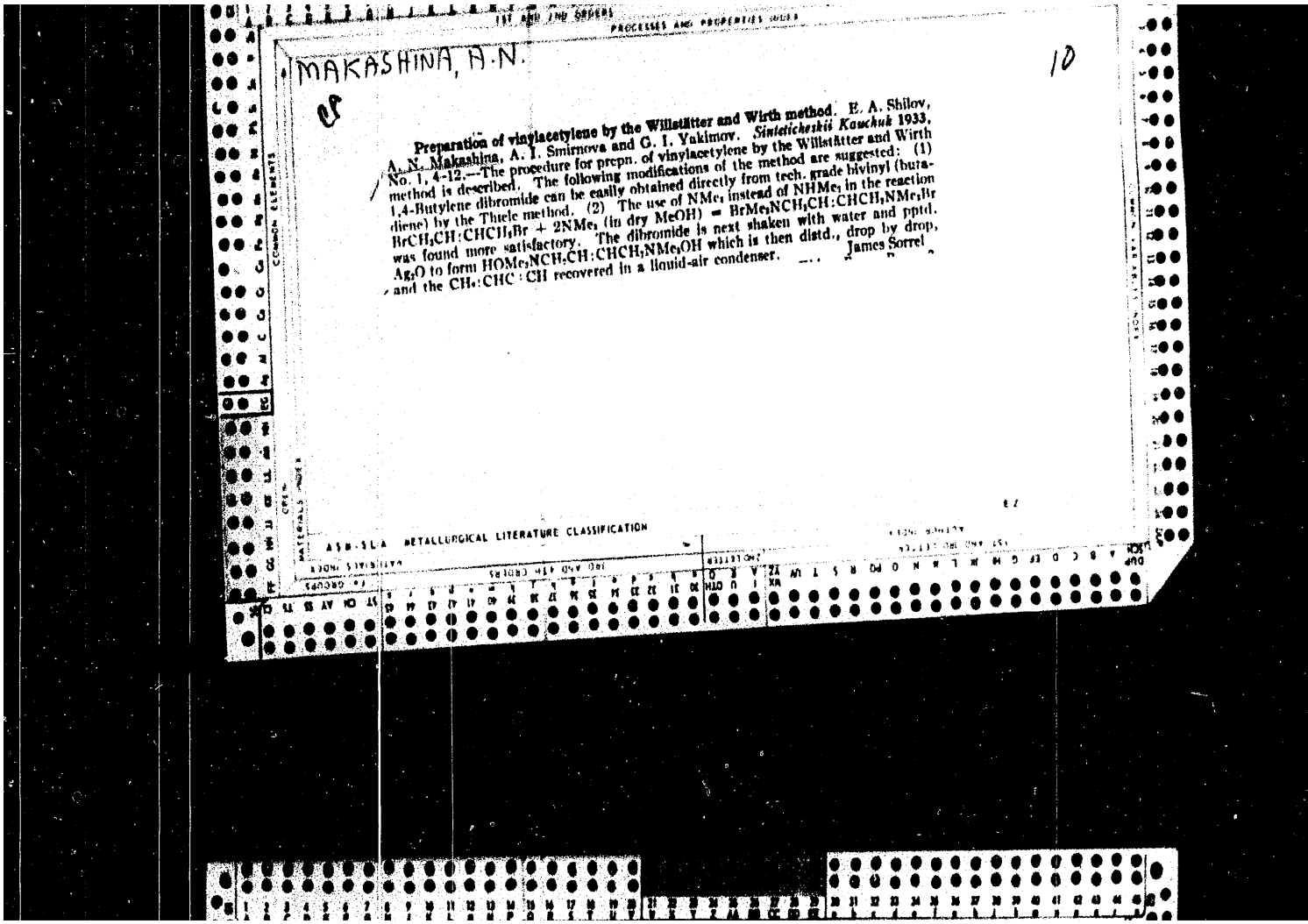
10

PROCESSES AND PROPERTIES INDEX

The investigation, purification and polymerization with sodium of butadiene obtained by pyrolysis of petroleum. N. Z. Andreev, A. N. Makashina and A. E. Mal'tzeva. *Sintet. Kauchuk* 1934, No. 3, 12-19.—Tech. butadiene (I), prepd. by the Butzev method of petroleum pyrolysis, does not polymerize with Na, because of destruction of Na by some admixed substances. Tech. I (d. 0.645; 39% I, b. −6° to 6°) was fractionated into the following fractions: (1) noncondensed at −20° (mostly propylene), 24.3%; (2) condensed at −20°, 10.5%; (3) fraction from −6° to +0°, 40.5%; (4) residue, 16.9%; (5) loss, 7.8%. I was polymerized with 1 and 0.5% Na after 4 days, but the polymer was fluid. A very small amt. of admixed substances (of unknown nature) affect the quality of polymer and they do not combine with the excess of Na (up to 5%). The use of neutral soln. of Cu_2Cl_2 (3% Cu_2Cl_2 in 15% NH_4Cl) to increase the amt. of I (up to 90%) is recommended.

A. Pestoff

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



MAKASHINA, A.N.

10

Preparation of vinylacetylene by the Willstätter and Wirth method. E. A. Shilov, A. N. Makashina, A. I. Smirnova and G. I. Yakimov. *Sinteticheskii Kauchuk* 1933, No. 1, 4-12.—The procedure for prepn. of vinylacetylene by the Willstätter and Wirth method is described. The following modifications of the method are suggested: (1) 1,4-Butylene dibromide can be easily obtained directly from tech. grade bivinyl (butadiene) by the Thiele method. (2) The use of NMe_3 instead of $NHMe_2$ in the reaction $BrCH_2CH:CHCH_2Br + 2NMe_3$ (in dry MeOH) = $BrMe_3NCH_2CH:CHCH_2NMe_3Br$ was found more satisfactory. The dibromide is next shaken with water and pptd. Ag_2O to form $HOMe_3NCH_2CH:CHCH_2NMe_3OH$ which is then distd., drop by drop, and the $CH_2:CHC:CH$ recovered in a liquid-air condenser. James Sorrel

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

MAKASHIN, MS., inzhener.

Increasing the dependability of electric motors used in automatic heating systems. Elek.stz.28 no.1:79-80 Ja '57. (MLRA 10:3)
(Electric motors)

MAKASHEVA V.D.

MAKASHEVA, V.D.; ANDREYEV, S.A.; DANILOV, A.Ya.; UGAROV, F.P.; PAK, F.F.; PODKOPAYEV, I.I.

Fortieth anniversary of the Great October Revolution. Khleb. i kond. prom. 1 no.9:31-36 S '57. (MIRA 10:11)

1. Mytishchinskiy khlebokombinat Moskovskogo oblastnogo tresta khlebopecheniya (for Makasheva, Andreyev, Danilov). 2. Klinskiy khlebokombinat Moskovskogo oblastnogo tresta khlebopecheniya (for Ugarov). 3. Podol'skiy khlebokombinat Moskovskogo oblastnogo tresta khlebopecheniya (for Pak, Podkopayev).
(Bakers and bakeries)

GUMAROVA, F.G.---(continued) Card 3.

19. Zav. Semipalatinskim oblastnym otdelom zdravookhraneniya (for Kislitsina). 20. Predsedatel' respublikanskogo komiteta soyuza medrabotnikov (for Polikarpov). 21. Zam. ministra zdravookhraneniya Uzbekskoy SSR (for Zairov). 22. Zav.Alma-Atinskim gorodskim otdelom zdravookhraneniya (for Apsatarov). 23. Zav. Severo-Kazakhstanskim oblastnym otdelom zdravookhraneniya (for Novosel'tsev). 24. Zav.rayzdravotdelom Shortandinskogo rayona Akmolinskoy oblasti (for Petrov). 25. Zav. ministra zdravookhraneniya Soyuza SSR (for Khomutov). 26. Zav.ministra zdravookhraneniya ArmSSR (for Galustyan). 27. Predsedatel' Komiteta fizicheskoy kul'tury i sporta pri Sovete Ministrov KazSSR (for Artykov). 28. Sekretar' TSentral'nogo Komiteta Kommunisticheskoy partii Kazakhstana (for Dzhandil'din). 29. Ministr zdravookhraneniya Sovetskogo Soyuza (for Kovrigina). 30. Pervyy zamestitel' predsedatelya Soveta Ministrov KazSSR (for Beysebayev). 31. Uchastkovyy vrach Kustanayskoy oblasti (for Bublik). 32. Zam.predsedatelya Obshchestva Krasnogo Kresta Kazakhstana (for Chernysh).

(KAZAKHSTAN--PUBLIC HEALTH)

GUMAROVA, F.G.----(continued) Card 2.

3. Zav.Vostochno-Kazakhstanskim oblastnym otdelom zdravookhraneniya (for Nigmatulin). 9. Chlen kollegii Ministerstva zdravookhraneniya SSSR (for Zakharov). 10. Zav.Kustanayskim oblastnym otdelom zdravookhraneniya (for Luzina). 11. Ministr zdravookhraneniya Turkmenskoy SSR (for Nepesov). 12. Zav.sel'skim vrachebnym uchastkom Priirtyshskogo rayona Pavlodarskoy oblasti (for Stasyunas). 13. Glavnyy vrach Kapal'skoy rayonnoy bol'nitsy Taldy-Kurganskoy oblasti (for Isabekov). 14. Zav. zhenotdelom Yuzhno-Kazakhstanskogo obkoma partii (for Sarsenbayeva). 15. Zav. Dzhambulskim oblastnym otdelom zdravookhraneniya (for Katsyuba). 16. Glavnyy vrach Alma-Atinskogo oblastnogo tuberkuleznogo dispansera (for Lenovskiy). 17. Ministr zdravookhraneniya Tadzhikskoy SSR (for Akhmedov). 18. Nachal'nik Kazaptekoupravleniya (for Subkhanberdin).

(Continued on next card)

GUMAROVA, F.G.; GOSTEVA, A.G.; TULEGENOV, Z.K.; MAKASHEVA, S.U.; POLOSUKHIN, A.P.; MUSABEKOV, A.M.; DANILOV, Yu.S.; NIGMATULIN, M.A.; ZAKHAROV, F.G.; LUZINA, Z.T.; NEPESOV, T.I.; STASYUNAS, I.P.; ISABEKOV, O.I.; SARSENBAYEVA, K.; KATSYUBA, V.T.; LENOVSKIY, A.S.; AKHMEDOV, K.Yu.; SUBKHANBERDIN, S.Kh.; KISLITSINA, N.P.; POLIKARPOV, S.V.; ZAIROV, K.S.; APSATAROV, A.A.; NOVOSEL'TSEV, V.N.; PETROV, N.N.; KHOMUTOV, M.V.; GALUSTYAN, A.S.; ARTYKOV, A.Ye.; DZHANDIL'DIN, N.D.; KOVRIGINA, M.D.; BEYSEBAYEV, M.; BUBLIK, V.N.; CHERNYSH, A.M.

Discussion on the report of S.R.Karynbaev, Minister of Public Health of the Kazakh S.S.R., on the status and improvement of medical care. Zdrav.Kazakh. 17 no.4/5 '57. (MIRA 12:6)

1. Zav. Alma-Atinskim oblastnym zdravotdelom (for Gumarova). 2. Vrach bol'nitsy g.Leninogorska Vostochno-Kazakhstanskogo oblzdravotdela (for Gosteva). 3. Zav. Karagandinskim oblastnym otdelom zdravookhraneniya (for Tulegenov). 4. Zav.Kzyl-Ordinskim oblastnym otdelom zdravookhraneniya (for Makasheva). 5. Vitse-prezident AN KazSSR (for Polosukhim). 6. Zav.Aktyubinskim oblastnym otdelom zdravookhraneniya (for Musabekov) 7. Ministr zdravookhraneniya Kirgizii (for Danilov).

(Continued on next card)

MAKASHEVA, S.U.

Medical practice in Syr-Dar'ia. Feldsher & akush. No.1:53-55 Jan 51.
(CLML 20:5)

1. Written by S.U.Makasheva, Head of Syr-Dar'inskiy Rayon Public Health Department.

MAKASHEVA, R.K.

Neglected complicated forms of skin tuberculosis. Zdrav. Kazakh. 22 no.2:44-47 '62. (MIRA 15:4)

1. Iz kafedry kozhno-venericheskikh bolezney (zav. - prof. U.B. Berdybayev) Kazakhskogo meditsinskogo instituta.
(SKIN--TUBERCULOSIS)

MAKASHEVA, R.K.; P'YANKOVA, Z.P.

Steroid hormones in the treatment of skin diseases. Zdrav. Kazakh. 21 no.11:45-49 '61. (MIRA 15:7)

1. Iz kafedry kozhnykh bolezney (zav. - prof. U.B. Berdybayev) Kazakhskogo meditsinskogo instituta i Kazakhskogo venerologicheskogo instituta (direktor - kand. med. nauk M.O. Omarov).
(SKIN--DISEASES) (STEROID HORMONES)

MAKASHEVA, R.K., assistent

Problems of disinfection in fungus diseases. Zdrav.Kazakh. 16 no.8: 34-37 '56. (MLRA 10:1)

1. Iz kafedry kozhnykh i venericheskikh bolezney (zav. kafedroy - professor S.A.Poplavskiy) Kazakhskogo gosudarstvennogo meditsinskogo instituta imeni V.M.Molotova.
(FUNGI, PATHOGENIC) (DISINFECTION AND DISINFECTANTS)

MAKASHEVA, R.Kh., kand.sel'skokhoz.nauk

Garden pea varieties in Netherlands. Trudy po prikl. bot., gen. i sel. 32 no.3:254-261 '59. (MIRA 14:5)
(Netherlands--Peas--Varieties)

The Resistance of Petroleum and Synthetic Oils to Air Impact.

additives did not affect the resistance of the oils, but at higher concentration (up to 25%) the resistance increases slightly. In the experimental work A. A. Yemel'yanova assisted. There are 4 Tables.

1. Oils--Test reults 2. Compressed air--Chemical effects
3. Pressure--Chemical effects

The Resistance of Petroleum and Synthetic Oils to Air Impact.

trimethylethane and diethyleneglycol) and fractions of C_5 - C_{10} fatty acids. Results of these investigations are tabulated (Table 3), and show that esters of triethanolamine and trimethylethane are unstable to air impact. Esters of diethyleneglycol (flashpoint = 170°C) showed satisfactory resistance. When testing the effect of polymeric additives (polyisobutylene, polymethacrylates) on the viscosity-temperature properties, and on the resistance of the oils to air impact, it was found that polymethacrylates had less effect than polyisobutylene, but when polymethacrylates were added the viscosity temperature properties of the oils were improved. The same compounds were tested as additives for pentaerythritol and diethyleneglycol. Mineral oils showed better viscosity-temperature properties when sedimented with polymethacrylates. It was found that low concentration of the polymeric

The Resistance of Petroleum and Synthetic Oils to Air Impact.

which burned when the resistance of the oil was too low. Results varied according to the type of oil used, and according to its viscosity (Table 1). When oils MK-22, MS-20, MS-14 and the lubricating oil 18 were tested, (having a viscosity above 14-15 cps, at 100°C, and a flash-point of above 200°C), practically no changes were observed, but oils with a viscosity of 5-8cps, a temperature of 100°C, and a flashpoint of 185-200°C (lubricating oil 6 and the machine oil SU) proved to be less resistant. Data on the resistance to air impact of various structural fractions of petroleum oils (Table 2), separated from oils with varying viscosities by chromatographic separation, shows that high viscosity oils, as well as the naphthenic-paraffinic and aromatic fractions separated therefrom, are equally resistant to air impact. Low viscosity oils (turbine, transformer oils etc.) and their separated fractions show the same degree of instability to air impact. The addition of anti-oxidants (parahydroxy-diphenylamine, ionol, phenothiazine), or some sulphur compounds, did not affect the unstable oils. Similar experiments were carried out on some synthetic products (esters based on pentaerythritol, triethanolamine,

SOV/65-58-8-2/14

AUTHORS: Kreyn, S. E. and Makasheva, O. P.

TITLE: The Resistance of Petroleum and Synthetic Oils to Air Impact. (Ustoychivost' neftyanykh i sinteticheskikh masel k vozdushnomu udaru).

PERIODICAL: Khimiya i Tekhnologiya Topliv i Masel, 1958, Nr.8. pp. 9 - 15. (USSR).

ABSTRACT: The nature and mechanism of the phenomena during air impact on the oil layer have not been investigated sufficiently. According to some calculations the pressure in the air pipe, when air is introduced under pressure of 200 atms, reaches an order of 1500 atms and a temperature around 600°C. During the investigations, the authors found that the balls made of glass wool and wetted with oil melted under these conditions. Experiments on the changes in the properties of oils during air impact (chemical composition, structure etc.) were carried out in a special apparatus. Two drops of the tested oil were placed on clean asbestos fibres, situated on the bottom of the apparatus and kept under a pressure of 200 - 205 atms. The properties of the oils could be defined by taking into account the changes in the asbestos fibre

Card 1/4

AID P - 288

Neft. Khoz., v. 32, #4, 65-72, Ap 1954 (additional card)

Card : 2/2

Institutions: Azerbaydzhan Scientific Research Institute (AzNII) and the Central Scientific Research Institute of Aviation Fuels and Oils (TsIATIM)

Submitted : No date

MAKASHEVA, O.P.

AID P - 288

Subject : USSR/Engineering

Card : 1/2

Author : Losikov, B. V., Makasheva, O. P. and Aleksandrova, L. A.

Title : Mechanism of action of anti-corrision additives to mineral oils

Periodical : Neft. Khoz., v. 32, #4, 65-72, Ap 1954

Abstract : The authors present the results of their experiments on the effect of temperature and additives on the formation of protective film over the surface of copper-lead specimens. Additives of Soviet types H_3 and H_4 were used in the aviation lubricating oil of types PC-13, AzNII-TsIATIM-1 (Azerbaydzhan Scientific Research Institute - Central Scientific Research Institute of Aviation Fuels and Oils - 1). Copper-lead specimens of small plates or of powdered forms were subjected to tests. The mechanism of the formation of protective film is described and presented in 6 charts and 4 tables based on test results.

MAKASHEVA, I.Ye.; KIRIN, I.S.; MAKASHEV, Yu.A.

Determination of gallium in niobium-gallium alloys. Zav.lab. 31 no.10:1192 '65. (MIRA 19:1)

1. Fiziko-tekhnicheskiy institut imeni Ioffe AN SSSR.

ISAYEVA, Ye.A.; MAKASHEVA, I.Ye.; OBUKHOV, A.P.

Analysis of pure silicon carbide by the neutron activation method.
Zhur.anal.khim. 18 no.8:979-983 Ag '63. (MIRA 16:12)

1. A.F.Ioffe Physico-Technical Institute, Academy of Sciences, U.S.S.R., Leningrad.

6

impurities; radiochemical separation of the elements was then carried out. It was shown experimentally that chlorination is preferable as a method of separation if volatile impurities (As, Sb, In) are to be determined, since the losses of these impurities are greater on alkaline fusion than on chlorination at 1250C. The volatile chlorides formed on chlorination were collected in HCl solution. The solution was chemically treated to isolate each impurity; samples of the impurities for counting were then prepared by a method previously described (Makasheva, I. Ye., Maslov, I. A., Obukhov, A. P., Zh. analit. khimii, 15, 329 (1960)). The standard samples for each element were prepared in the same manner after irradiation simultaneously with the unknown sample and carrier addition. Absorption spectra of γ-radiation from the radioisotopes produced were used to calculate the activity of the unknowns and of the standards, making it possible to determine the amount of each element in the sample. The neutron cross section σ_{at} for each radioisotope and the energy of γ-radiation used in measuring the activity are given. The sensitivity of the determinations was in the 10^{-8}—10^{-7}% range. "In conclusion, the authors express their gratitude to I. A. Maslov and A. D. Kozlov, who performed the measurements." Orig. art. has: 2 tables and 1 figure.

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR, Leningrad (Physicotechnical Institute, AN SSSR)

L 18280-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD/JG
ACCESSION NR: AP3004945 S/0075/63/018/008/0979/0983

AUTHOR: Issyeva, Ye. A.; Makasheva, I. Ye.; Obukhov, A. P.

TITLE: Analysis of pure silicon carbide by neutron activation

SOURCE: Zhurnal analiticheskoy khimii, v. 18, no. 8, 1963, 979-983

TOPIC TAGS: silicon carbide, trace analysis, neutron activation, activation analysis, neutron activation analysis, zinc, copper, arsenic, antimony, phosphorus, impurity, copper 64, zinc 69m, arsenic 76, antimony 122, phosphorus 32, thermal neutron, Gamma-activity, Beta-activity, nuclear reactor, Gamma-spectrometer, end-window Beta-counter, radiochemical separation, chlorination, neutron cross section, Gamma-radiation energy

ABSTRACT: Trace amounts of impurities — zinc, copper, arsenic, antimony, and phosphorus — have been determined in silicon carbide crystals by measuring the γ-activity of Zn^{69m}, Cu^{64}, As^{76}, and Sb^{122} isotopes with a multichannel γ-spectrometer and the β-activity of the P^{32} isotope with an end-window β-counter. The isotopes were produced by irradiating encapsulated SiC samples for 1—3 days with $n \cdot 10^{13}$ thermal neutrons/$cm^2 \cdot sec$ in a nuclear reactor. To the irradiated sample were added 5—10 mg of Zn, Cu, As, Sb, and P, as carriers for the

Card 1/2

Chemical identification of ...

admixtures corresponded to 10^{-4}%. The analytical procedure is described in detail. The method was applied for the determination of phosphorus and thallium in SiO_2, Si, NaI (Tl) and $LiCl \cdot H_2O$. From 4×10^{-7} to 0.17% of phosphorus and from 4×10^{-6} to 0.1% of thallium was determined in the above substances. It is concluded that the method of purification is sufficiently accurate so that labour consuming radiometric identification of these two elements is unnecessary. There are 3 tables.

SUBMITTED: March 24, 1961

Card 2/2

S/186/62/004/003/015/022
E071/E433

AUTHORS: Isayeva, Ye.A., Makasheva, I.Ye., Maslov, I.A., Obukhov, A.P.

TITLE: Chemical identification of phosphorus and thallium in the quantitative neutron activation analysis

PERIODICAL: Radiokhimiya, v.4, no.3, 1962, 345-350

TEXT: The determination of admixtures by the activation analysis is usually associated with their radiometric identification for which the separation and purification to "radiometric purity" is necessary. The authors attempted to improve the method of chemical separation of phosphorus and thallium (the knowledge of the content of which in some materials such as semiconductor silicon and germanium, luminophors, etc is necessary) so as to exclude the necessity for radiometric identification. The method of separation of P^{32} and Tl^{204} in the form of $Tl_2Cr_2O_4$ and ammonium phosphormolybdate was developed and checked on artificial mixtures containing Fe^{59}, Zn^{65}, Ag^{110m}, In^{114m}, Sb^{124}, Ta^{182} and Bi^{210} and by imitating the separation of phosphorus and thallium from irradiated specimens in which the amount of individual

Card 1/2

81786

Determination of Microimpurities in Silicon From the γ-Spectra of Their Radioactive Isotopes

S/032/60/026/07/15/055
B015/B068

about 50 isotopes with measurable γ-radiation form. In the present case, 17 elements (Table 2) were simultaneously determined with a scintillation-gamma-spectrometer (with an ФЭУ-С (FEU-S) photoelectron multiplier) provided with a NaI (Tl) crystal. The unit was calibrated against known γ-spectral lines. The results obtained by analysis of two silicon samples are given in Table 3. Maximum sensitivity is (Table 4) 10^{-11} g for Au, 10^{-10} g for Ni, Mn, Cu, As, and Sb, and $5 \cdot 10^{-6}$ g for Sn. There are 2 figures, 4 tables, and 6 references: 2 Soviet, 3 American, and 1 British.

ASSOCIATION: Fiziko-tekhnicheskiy institut Akademii nauk SSSR (Institute of Physics and Technology of the Academy of Sciences USSR)

Card 2/2

81786

S/032/60/026/07/15/055
B015/B068

5.5250

AUTHORS: Yerokhina, K. I., Lemberg, I. Kh., Makasheva, I. Ye., Maslov, I. A., Obukhov, A. P.

TITLE: Determination of Microimpurities in Silicon From the γ-Spectra of Their Radioactive Isotopes

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 7, pp. 821-827

TEXT: A method of radioactivation analysis is described, with γ-radiation of the impurities in silicon applied in the production of semiconductors being studied. The sample is activated in the neutron flux of a reactor. Work was performed in a flux of thermal neutrons with $9 \cdot 10^{12}$ neutrons$\cdot$cm$^{-2}\cdot$sec^{-1}. As the sample in the reactor is exposed to the action of fast neutrons in addition to slow ones, these nuclear transformations have also to be considered (Table 1). Since the major part of isotopes formed from Si is short-lived, only γ-radiation of Si^{31} must be considered in measurements. From the remaining neutron-activated elements,

Card 1/2

MAKASHEVA, I.Ye.; MASLOV, I.A.; OBUKHOV, A.P.

Radioactivation analysis of semiconducting silicon by means of a multi-channel γ-spectrometer. Zhur.anal.khim. 15 no.3:329-333 My-Je '60. (MIRA 13:7)

1. Institute of Technical Physics, Academy of Sciences, U.S.S.R., Leningrad.
(Silicon--Analysis)

MAKASHEVA, I.Ye.; KIRIN, I.S.; MAKASHEV, Yu.A.

Determination of gallium in niobium-gallium alloys. Zav.lab. 31 no.10:1192 '65. (MIRA 19:1)

1. Fiziko-tekhnicheskiy institut imeni Ioffe AN SSSR.

KIRIN, I.S.; MOSKALEV, P.N.; MAKASHEV, Yu.A.

Formation of uncommon phthalocyanines of rare-earth elements. Zhur.neorg.khim. 10 no.8:1951-1953 Ag '65.

(MIRA 19:1)

1. Fiziko-tekhnicheskiy institut imeni A.F.Ioffe AN SSSR.
Submitted December 30, 1964.

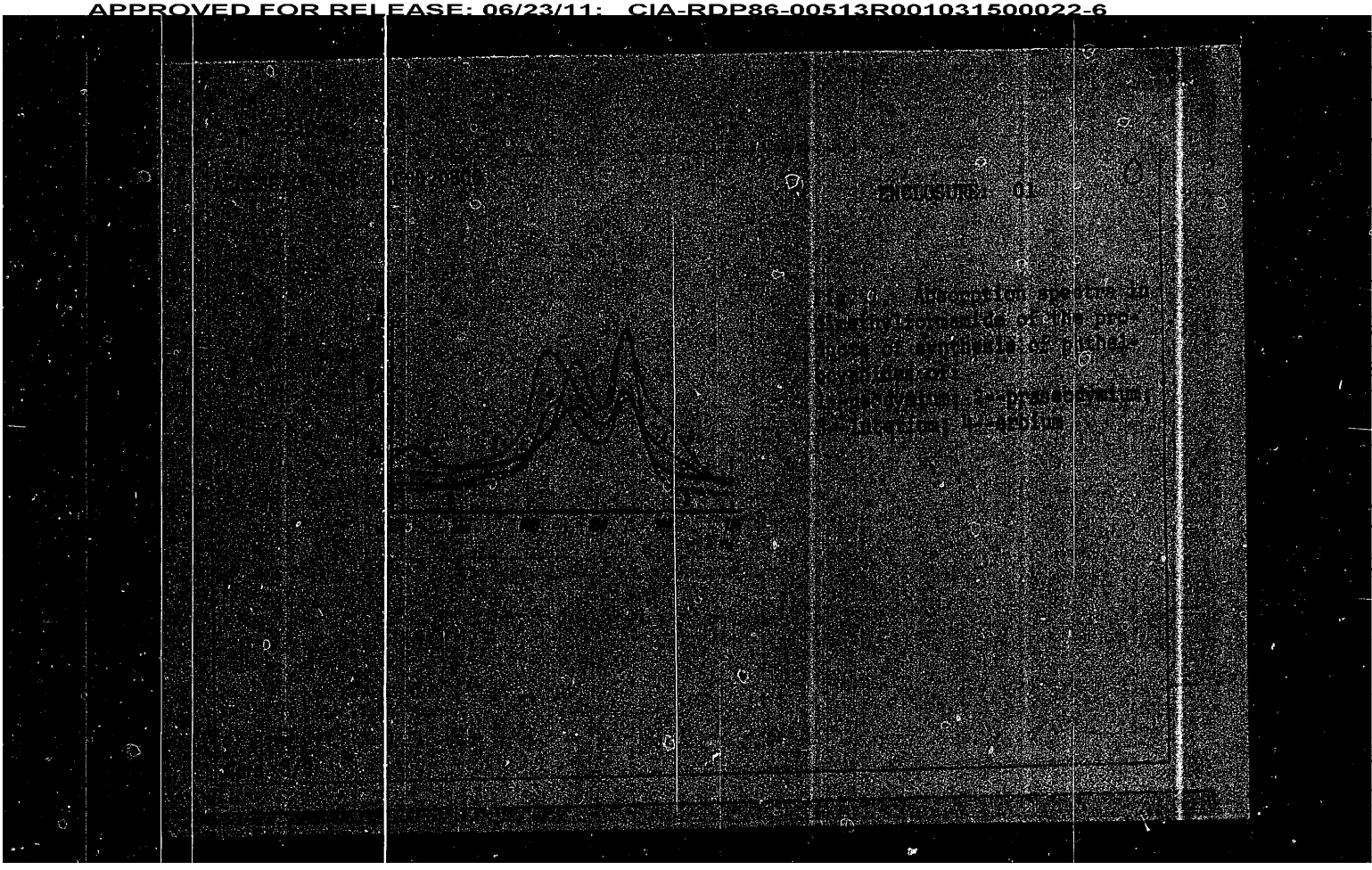
KUL'BA, F.Ya.; MAKASHEV, Yu.A.

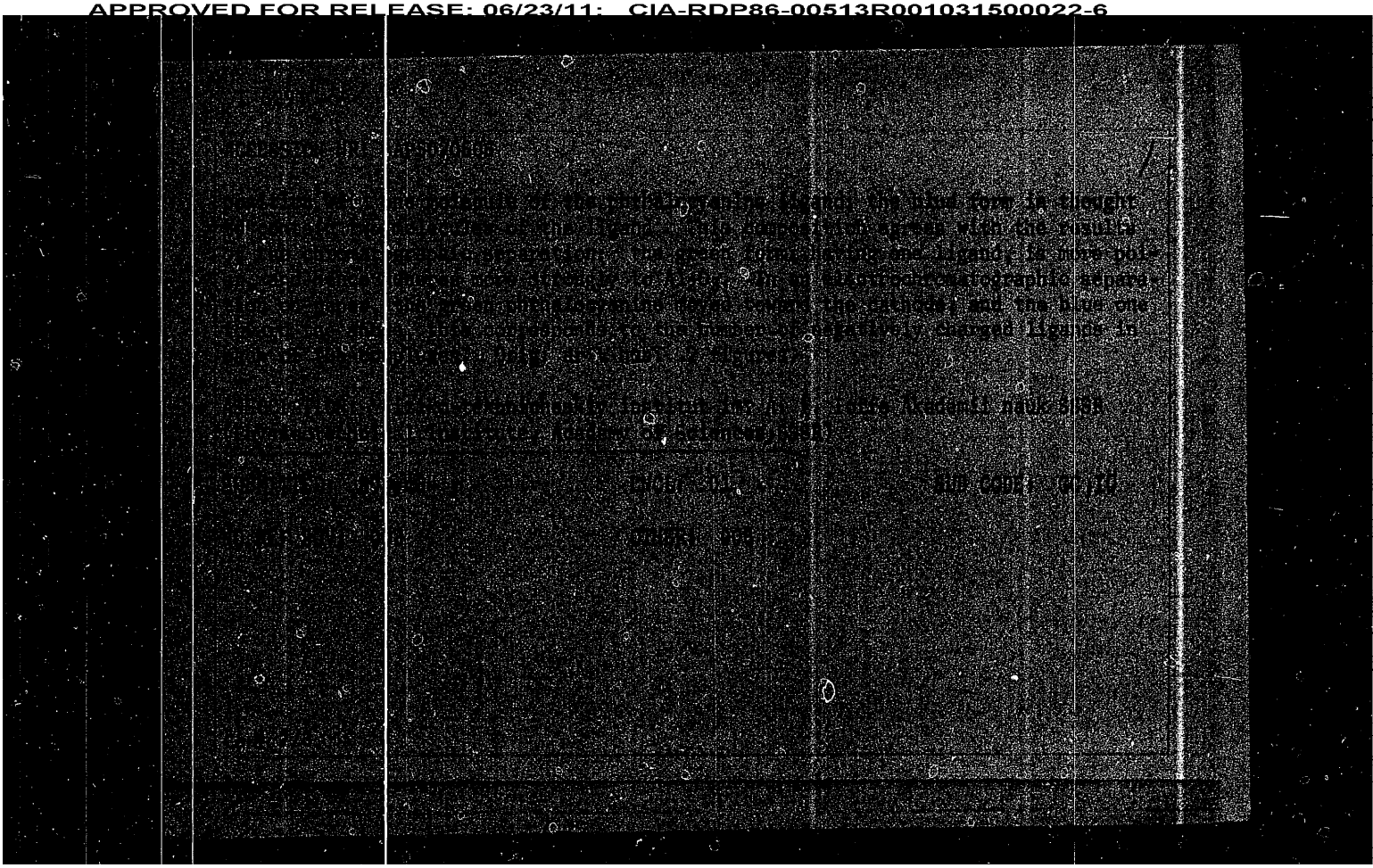
Reaction of trivalent thallium with nitrilotriacetic acid.
Zhur. neorg. khim. 10 no.5:1172-1178 My '65. (MIRA 18:6)

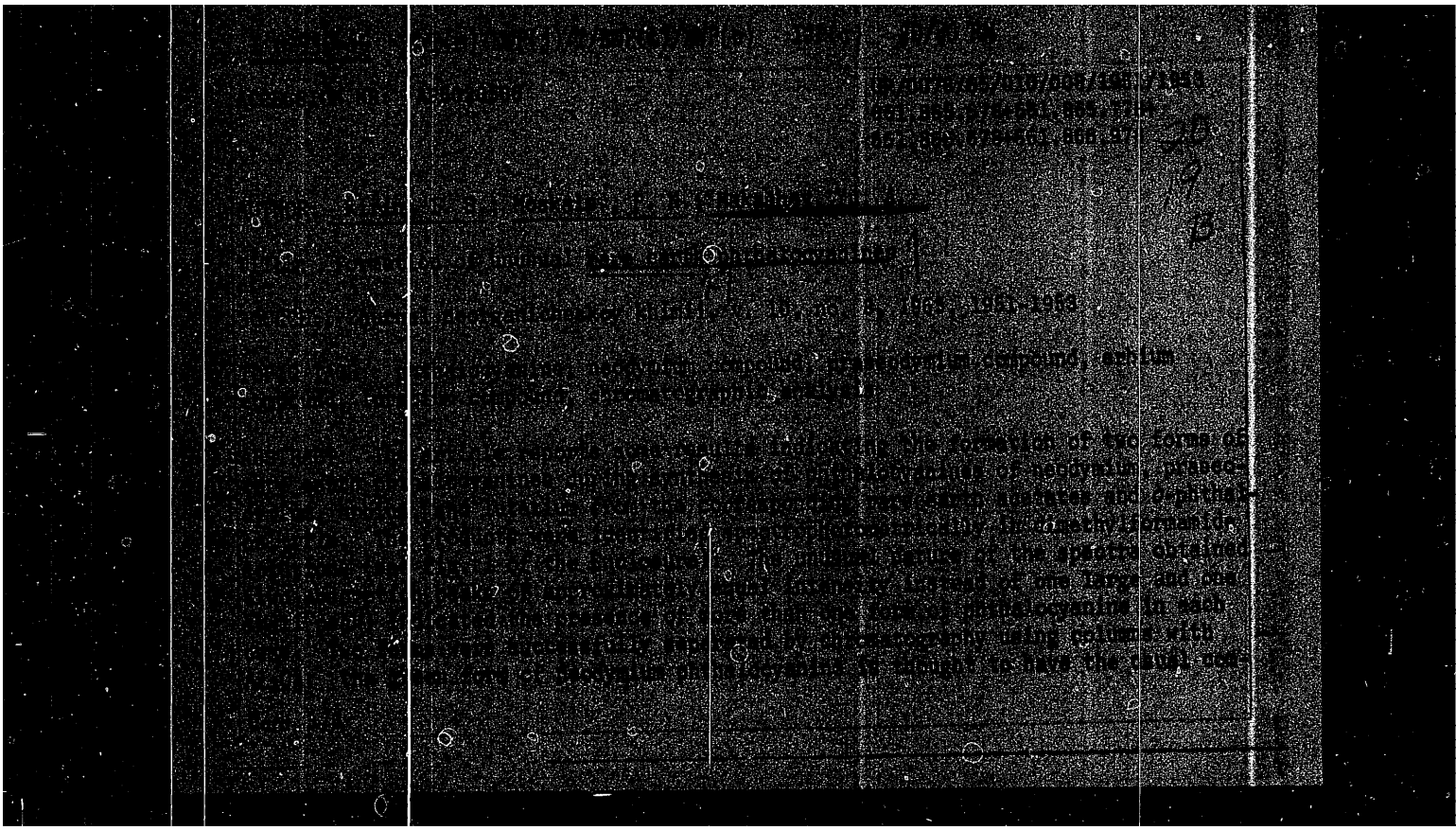
1. Fiziko-tekhnicheskiy institut imeni Ioffe AN SSSR i
Leningradskiy tekhnologicheskiy institut imeni Lensoveta.

IVANCHENKO, A.F.; KIRIN, I.S.; MAKASHEV, Yu.A.

Citrate complexes of lanthanum of 1 : 1 composition. Radiokhimiia 7 no.3:283-288 '65. (MIRA 18:7)







KUL'BA, F.Ya.; MAKASHEV, Yu.A.

Data on the thermochemistry of thallium (III) complex formation.
Zhur.prikl.khim. 35 no.3:663-664 Mr '62. (MIRA 15:4)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.
(Thallium compounds) (Thermochemistry)

KUL'BA, F.Ya; MAKASHEV, Yu.A.

Calorimetric measurement of the heats of neutralization of 1,10-phenanthroline and 2,2'-dipyridyl in aqueous solutions. Zhur.ob. khim. 32 no.6:1724-1727 Je '62. (MIRA 15:6)
(Phenanthroline) (Bipyridine) (Heat of neutralization)

KUL'BA, F.Ya.; MAKASHEV, Yu.A.

Thermochemistry of the complex formation of thallium (III) with 2,2'-dipyridyl and 1,10-phenanthroline in a aqueous solutions. Zhur.neorg.khim. 7 no.6:1280-1284 Je '62. (MIRA 15:6)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta, kafedra neorganicheskoy khimii.
(Thallium compounds) (Bipyridine) (Phenanthroline)

KUL'BA, F.Ya.; MAKASHEV, Yu.A.; GULLER, B.D.; KISELEV, G.V.

Study of complex formation between thallium (III) and 1, 10-phenanthroline and 2, 2'-bipyridine by the extraction method. Zhur.neorg.khim. 7 no.3:689-690 Mr '62. (MIRA 15:3)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta, kafedra neorganicheskoy khimii.
(Thallium compounds) (Phenanthroline) (Bipyridine)

KUL'BA, F.Ya.; MAKASHEV, Yu.A.; MIRONOV, V.Ye.

New complex aminates of trivalent thallium. Zhur.neorg.khim. 6 no.6:1481-1483 Je '61. (MIRA 14:11)

1. Leningradskiy tekhnologicheskiy institut im. Lensoveta, Kafedra neorganicheskoy khimii.
(Thallium compounds)

KUL'BA, F. Ya.; MAKASHEV, Yu.A.; MIRONOV, V. Ye.

Complex formation of trivalent thallium with 1,10-phenanthroline and 2,2'-dipryidyl. Zhur. neorg. khim. 6 no.3:630-635 Mr '61. (MIRA 14:3)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.
(Thallium compounds) (Bipyridine)
(Phenathroline)

VOLKONSKIY, Boris Vasil'yevich; KONOVALOV, Petr Fedorovich; MAKASHEV, Sergey Dmitriyevich; TOROPOV, N.A., doktor tekhn. nauk, prof., red.; MAKASHEV, S.D., nauchn. red.

[Mineralizers in the cement industry] Mineralizatory v tsementnoi promyshlennosti. Moskva, Stroiizdat, 1964. 197 p. (MIRA 17:4)

1. Chlen-korrespondent AN SSSR (for Toropov).

MAKASHEV, S.D.; SHTEYYERT, N.P.

Reviews and bibliography. TSement 29 no.3:24 My-Je '63.
(MIRA 17:1)